Artistry in Sound

ONKYO®

A-M70

Integrated Stereo Amplifier

Instruction Manual

• Congratulations on your purchase of the ONKYO A-M70 Amplifier. • Please read this manual thoroughly before making connections and turning power on. • Following the instructions in this manual will enable you to obtain optimum performance and listening enjoyment from your new A-M70. • Please retain this manual for future reference.

Features

- **High power output**
  The A-M70 delivers 50 watts of continuous RMS power per channel, into 8 ohms, with no more than 0.15% total harmonic distortion.

- **"CD DIRECT" Switch for CD sound free of coloration**
  Press the CD DIRECT switch and the tone, balance, Selective Tone Control and surround circuitry is bypassed, for pure CD sound free of spurious colorations.

- **Selective Tone Control**
  The Selective Tone Control adds excitement to video soundtracks and ordinary audio sources alike.

- **Surround sound capability for room filling four-channel sound**

- **One-touch source switching simplifies operation.**

- **Rec selector switch lets you listen to one source while recording another.**

- **System remote control capability**

Important safeguards

"WARNING"

"TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

"CAUTION"

"TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL."

FOR POWER CORDS WITHOUT PLUGS:

- Replacement and mounting of an AC plug on the power supply cord of this unit should be performed only by qualified service personnel.
- **IMPORTANT:** The wires in the mains lead are colored in accordance with the following code:
  Blue: Neutral
  Brown: Live

As the colors of the wires in the mains lead of this unit may not correspond with the colored markings identifying the terminals in your plug, proceed as follows:
The wire which is colored blue must be connected to the terminal which is marked with the letter N or colored black.
The wire which is colored brown must be connected to the terminal which is marked with the letter L or colored red.

Observe the following precautions to obtain trouble free performance for many years.

1. Avoid places subject to direct sunlight or extremely high or low temperatures.
2. Avoid damp of dusty places and places directly affected by vibrations from the speakers. In particular, avoid placing the unit on or above one of the speakers.
3. Avoid unstable locations and high places from which the unit could fall.
4. Ventilation – The unit should be situated so that its location or position does not interfere with proper ventilation. For example, the unit should not be placed on a bed, sofa, rug of similar surface that could block the ventilation openings or placed in a built-in installation, such as a bookcase or cabinet, that could impede the flow of air through the ventilation openings.
5. Heat – The unit should be situated away from heat sources such as radiators, heat registers, or other appliances (including amplifiers) that produce heat.
6. Cleaning of the internal parts should be performed only by qualified service personnel.
7. Spillage – Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.
8. Damage Requiring Service – The unit should be serviced by qualified service personnel when:
   A. The power supply cord or the plug has been damaged; or
   B. Objects have fallen or liquid has been spilled into the appliance; or
   C. The appliance has been exposed to rain; or
   D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
   E. The appliance has been dropped or the enclosure damaged.
9. Servicing – The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

- This apparatus complies with requirements of EEC directive 82/499/EEC.
- Das Gerät entspricht den Bestimmungen der EG-Richtlinien 82/499/EWG.
- Cet appareil répond aux spécifications de la directive CCE 82/499/CCE.
- Dit apparaat voldoet aan richtlijn 82/499/EEG.
- Apparatet opfylder kravene i EF direktivet 82/499/EF.
- Quest'apparecchio é stato prodotto in confornitá alle direttive CEE 82/499/CEE.
- Este aparato satisface los requisitos de las directrices 82/499 de la CEE.
- Denna komponent har tillverkats att uppfylla kraven som ställs i EEG-Directivet 82/499.

Precautions

1. **Warranty Card**
   The serial number is written on the rear panel of this unit. Copy the serial number and model number onto your warranty card and keep it in a safe place.

2. **Recording Copyright**
   Recording of copyrighted material for other than personal use is illegal without permission of the copyright holder.

3. **Care**
   From time to time you should wipe off the front and rear panels and the cabinet with a soft cloth. For heavier dirt, dampen a soft cloth in a weak solution of mild detergent and water, wring it out dry, and wipe off the dirt. Following this, dry immediately with a clean cloth. Do not use rough material, thinners, alcohol or other chemical solvents or cloths since these could damage the finish or remove the panel lettering.

4. **AC Fuse**
   The fuse is located inside the chassis and is not user serviceable. If power does not come on, contact your Onkyo dealer.

5. **Power**
   WARNING
   BEFORE TURNING ON POWER FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY.
   - Some models are designed for use only with the power supply voltage of the region where they are sold.
     - U.K. and Australian models: AC 240V, 50Hz
     - European models (except U.K.): AC 220V, 50Hz
     - Worldwide models: AC 120V and 220V switchable, 50/60Hz

- **Voltage selector (rear panel)**
  Worldwide models are equipped with a voltage selector to conform with local power supplies. Be sure to set this switch to match the power supply in your area before turning the power switch on. Voltage is changed by sliding the groove in the switch with a screwdriver to the right or left. Confirm that the switch has been moved all the way to the right or left before turning the power switch on. Models without a voltage selector can only be used in areas where the power supply voltage is the same as that of the unit.

WORLDWIDE MODELS ONLY

- **AC Outlet (UNSWITCHED)**
  An AC outlet is provided on the rear panel which is not switched on and off by the power switch on the rear panel. Capacity is 100 watts.

Rear panel facilities

Do not plug in the power cord until all connections have been completed.

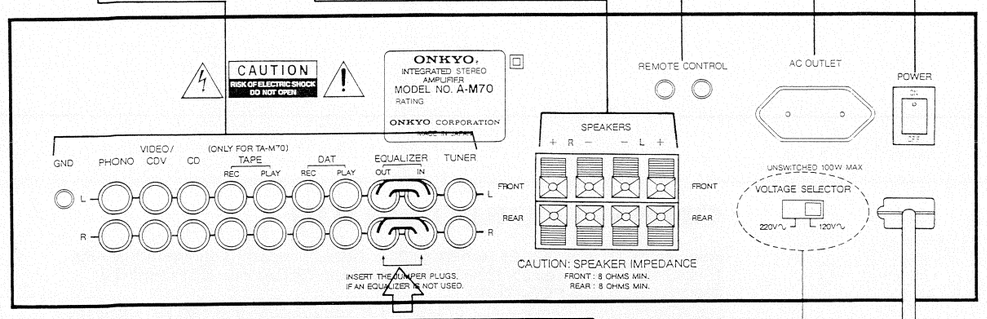
Input and Output Jacks
Do not connect components other than the TA-M70 to the TAPE jacks.

Speaker Terminals

AC Outlet (UNSWITCHED)
Capacity is 100 watts.

Power Switch (POWER)

Remote Control Jacks

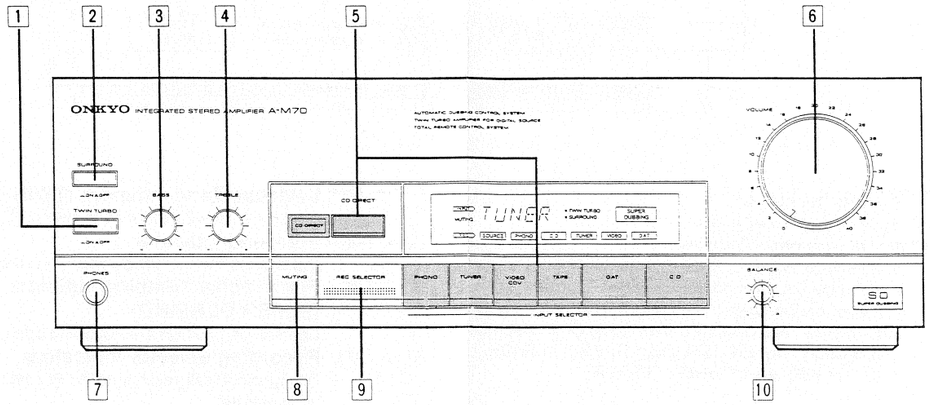


Insert the Jumper plugs into the pin-jacks, if an equalizer is not used.

Voltage Selector
Worldwide models only.

AC Power Supply Cord

Front panel facilities



1 **Selective Tone Switch (TWIN TURBO)**
Set this switch to the ON (▬) position for a more dynamic sound. The TWIN TURBO indicator c lights.

2 **Surround Switch (SURROUND)**
Set this switch to the ON (▬) position to add a surround effect and an extra feeling of width to any stereo source. It also gives a stereo-like effect to monaural sources. The SURROUND indicator d lights.

3 **Bass Control Knob (BASS)**
Adjust to boost or attenuate the bass frequencies.

4 **Treble Control Knob (TREBLE)**
Adjust to boost or attenuate the treble frequencies.

5 **Input Selector and CD DIRECT Buttons (INPUT SELECTOR, CD DIRECT)**

PHONO	: Press to listen to a turntable.
TUNER	: Press to listen to an FM or AM broadcast.
VIDEO/CDV	: Press to listen to an component connected to the VIDEO/CDV jacks.
TAPE	: Press to listen to the tape deck (TA-M70) connected to the TAPE jacks.
DAT	: Press to listen to a tape deck connected to the DAT jacks.
CD or CD DIRECT	: Press either the CD or CD DIRECT button to listen to a CD player. When you select CD DIRECT, an indicator lights and the balance, tone control, Twin Turbo and surround circuitry is bypassed for "pure" CD sound. The CD DIRECT indicator turns off when another Input Selector button is pressed.

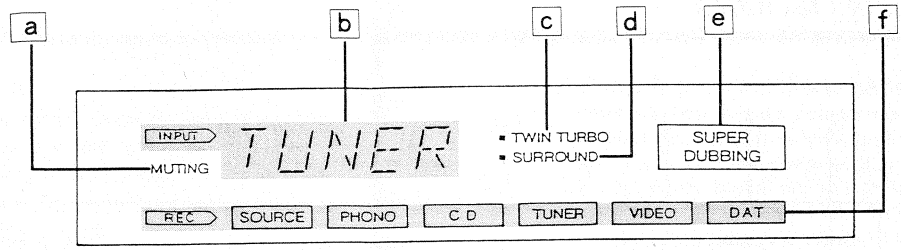
6 **Volume Control (VOLUME) and Indicator**
Turn clockwise to increase the volume level. When adjusted by the accessory remote control transmitter, the volume knob rotates and the volume indicator blinks on and off.

7 **Headphone Jack (PHONES)**
Stereo headphones with a standard binaural plug can be connected here.

8 **Audio Muting Button (MUTING)**
Press this button to cut output to the speakers. The Muting indicator a lights. Press again to resume listening at the previous volume level.

9 **Recording Selector Button (REC SELECTOR)**
Press this button to switch the recording signal output to the cassette tape deck connected to the TAPE jacks. When power is initially turned on, this selector is set to the SOURCE position and the sound source which is selected by the Input Selector button is output from the REC jacks. Each time the button is pressed, the recording source changes cyclically between SOURCE, PHONO, CD, TUNER, VIDEO and DAT and the respective indicator lights.

10 **Balance Control Knob (BALANCE)**
Controls the relative volume levels of the left and right channels.



[a] **Muting Indicator**
Lights when muting is ON.

[b] **Input Selector Display**
When one of the Input Selector buttons [5] is pressed, the name of the corresponding input source is displayed.
If an error occurs during Full Synchro Dubbing, "SUPER" and "ERROR" are displayed alternately. Other error indications include "TAPE 1" "ERROR," "TAPE 2" "ERROR," "CD" "ERROR" and "TUNER" "ERROR."

[c] **Selective Tone Indicator (TWIN TURBO)**
Lights when the Selective Tone switch [1] is depressed.

[d] **Surround Indicator**
Lights when the Surround switch [2] is depressed.

[e] **Full Synchro Dubbing Indicator (SUPER DUBBING)**
Lights during Full Synchro Dubbing operation.

[f] **Recording Selector Indicators**
Changes cyclically each time the Recording Selector button [9] is pressed.

Troubleshooting guide

Trouble	Cause	Remedy
No power.	• AC fuse burned out.	• Contact Onkyo authorized service center.
Power switch on but no sound.	• Bad connections.	• Check input leads, speaker leads, pin plugs, etc.
Hum, low frequency noise.	• Poor or no input ground. • Poor or no phono motor ground.	• Check outer conductor of input plugs. • Check for proper ground connection.
Howling when the volume is turned up.	• Turntable and speakers are too close together.	• Move them farther apart.
Rough or scratchy sound. High range is not clear.	• Treble control is set too high.	• Turn treble control down.

Specifications

Power Output:	50 watts per channel, min. RMS, at 8 ohms, both channels driven from 20 Hz to 20 kHz, with no more than 0.15% THD.
Total Harmonic Distortion:	0.15% at 50 watts
IM Distortion:	0.1% at 50 watts
Damping Factor:	40 at 8 ohms
Frequency Response:	15–30,000 Hz ±1 dB
Sensitivity and Impedance:	Phono: 2.5 mV 50 kohms Tuner, CD, Video/CDV: 150 mV/50 kohms Tape, DAT Play: 150 mV/50 kohms Tape, DAT Rec: 150 mV/4.5 kohms (phono)
Phono Overload:	120 mV RMS at 1 kHz, 0.5% THD
Bass Control:	±10 dB at 100 Hz
Treble Control:	±10 dB at 10 kHz
Signal to noise Ratio:	Phono: 80 dB (IHF A), 5mV input CD & Tape: 95 dB (IHF A)
Selective Tone Control:	+15 dB at 55 Hz, +6 dB at 10 kHz

General

Power Supply:	European models: AC 220V, 50Hz U.K. & Australian models: AC 240V, 50Hz Worldwide models: AC 120V and 220V switchable, 50/60Hz
Dimensions:	360(W) x 116(H) x 347(D) mm 14-3/16" x 4-9/16" x 13-11/16"
Weight:	5.7 kg, 12.6 lbs.

Specifications are subject to change without notice due to product improvements.